2006 Consumer Confidence Report

(Annual Drinking Water Quality Report)

LACKLAND AIR FORCE BASE

37 CES/CEV, 210-671-4844

What does this Consumer Confidence Report (CCR) mean? This CCR is an annual report that summarizes the quality of the drinking water provided to our customers. Each year Bioenvironmental Engineering (BE) and Civil Engineering (CE) are required to conduct water sample analysis/tests as part of U.S. Environmental Protection Agency (EPA) requirements. These collected samples are analyzed by state certified labs and are validated by Texas Commission of Environmental Quality as well as BE and CE water program managers. These water sampling requirements and the respective analysis results are provided in this CCR.

What do these sample results mean? All samples collected during 2006 were below the Maximum Contaminant Level (MCL), highest permissible level of a contaminant in drinking water, or the Action Level (AL), concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Some contaminants are naturally occurring in the environment and in the local water system. The presence of these naturally occurring contaminants does not necessarily indicate that water poses a health risk. All drinking water provided to our customers is properly treated and tested to ensure the highest quality water possible. During 2006 all water samples collected were below all MCLs and ALs respectively. **This means that the drinking water provided to our customers is safe for consumption with no health risks associated with our water system.**

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

WATER SOURCES: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides,

herbicides, radioactive contaminants, and organic chemical contaminants.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (210) 671-4844 - para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from GROUND water sources. It comes from the following Lake/River/Reservoir/Aquifer: EDWARDS SOUTH BFZ. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies. For more information on source water assessments and protection efforts at our system, please contact us.

ALL drinking water may contain contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are no t causes for health concern. Therefore, secondaries are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

About The Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

DEFINITIONS

Maximum Contaminant Level (MCL): The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ABBREVIATIONS

NTU - Nephelometric Turbidity Units
MFL - million fibers per liter (a measure of asbestos)
pCi/L - picocuries per liter (a measure of radioactivity)
ppm - parts per million, or milligrams per liter (mg/L)
ppb - parts per billion, or micrograms per liter (µg/L)
ppt - parts per trillion, or nanograms per liter
ppq - parts per quadrillion, or picograms per liter

Public Participation Opportunities

Consumers may contact Bioenvironmental Engineering (37 AMDS/SGPB) with any questions or concerns on drinking water quality.

Location: Building 9020, Room 304

Phone Number: 210-292-9075

LACKLAND AFB (PWS 0150114)

Inorganics Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Constituent
2006 2002	Barium	0.051	0.037	0.065	2	2	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2006 2002	Chromium	2.25	1.2	3.3	100	100	ppb	Discharge from steel and pulp mills; Erosion of natural deposits.
2006 2002	Fluoride	0.65	0.26	1.04	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2006 2005	Nitrate	1.51	0.99	2.03	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2006 2005	Combined Radium 226 & 228	0.95	0	1.9	5	0	pCi /L	Erosion of natural deposits.
2006 2005	Gross beta emitters	3.75	0	7.5	50	0	pCi /L	Decay of natural and man-made deposits.
2006 2005	Gross alpha	5.05	0	10.1	15	0	pCi /L	Erosion of natural deposits.

Organic Contaminants

Year or Range	Contaminant	Highest Average	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2002	Toluene	2.85	0	5.7	1000	1000	ppb	Discharge from petroleum factories.
2002	Ethylbenzene	3.5	0	7.0	700	700	ppb	Discharge from petroleum refineries.

Maximum Residual Disinfectant Level

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Contaminant
2006	Chlorine Residual, Free	0.65	0	1.3	4	4	ppm	Disinfectant used to control microbes.

Disinfection By-Products

Year	Contaminants	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2006	Total Haloacetic Acids	5.15	0	10.3	60	ppb	By-product of drinking water disinfection.
2006	Total Trihalomethanes	3.6	0	7.2	80	ppb	By-product of drinking water disinfection.

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Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2006	Chloroform	0	0	0	ppb	Byproduct of drinking water disinfection.
2006	Bromoform	1.1	0	2.2	ppb	Byproduct of drinking water disinfection.
2006	Bromodichloromethane	0.9	0	1.8	ppb	Byproduct of drinking water disinfection.
2006	Dibromochloromethane	1.6	0	3.2	ppb	Byproduct of drinking water disinfection.

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2004	Lead	7.8	2	15	ppb	Corrosion of household plumbing systems; erosion from natural deposits.
2004	Copper	0.192	0	1.3	ppm	Corrosion of household plumbing systems; erosion from natural deposits; Leaching from wood preservatives.

Turbidity NOT REQUIRED

Total Coliform:

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Year	Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2006	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment

*** Two or more coliform found samples in any single month**

Fecal Coliform: REPORTED MONTHLY TEST FOUND NO FECAL COLIFORM BACTERIA.

NOTE: In 2006, Bioenvironmental Engineering collected a total 246 samples, and 2 received initial positives; however, all repeat samples for these two initial samples came back negative for total coliform bacteria.

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Secondary and Other Constituents Not Regulated

(No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2006 2002	Aluminum	0.0035	0	0.007	50	ppm	Abundant naturally occurring element.
2006 2002	Bicarbonate	196	190	202	N/A	ppm	Corrosion of carbonate rocks such as limestone.
2006 2002	Calcium	62	55.4	69.5	N/A	ppm	Abundant naturally occurring element.
2006 2005	Chloride	17	17	17	300	ppm	Abundant naturally occurring element; used in water purification; byproducts of oil field activity.
2006 2002	Copper	0.023	0.005	0.041	N/A	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2006 2002	Hardness as Ca/Mg	217	196	237	N/A	ppm	Naturally occurring calcium and magnesium.
2006 2002	Iron	68	0	136	300	ppb	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2006 2002	Magnesium	16	14.1	18	N/A	ppm	Abundant naturally occurring element.
2006 2002	Manganese	1.7	0	3.3	50	ppb	Abundant naturally occurring element.
2006 2002	Nickel	0.002	0.002	0.002	N/A	ppm	Erosion of natural deposits
2005 2006	pH	7.6	7.5	7.7	7	units	Measure of corrosivity of water.
2006 2002	Sodium	21	9.65	33.1	N/A	ppm	Erosion of natural deposits; byproduct of oil field activity.
2006 2002	Sulfate	19	14	24	300	ppm	Erosion of natural deposits; byproduct of oil field activity.
2006 2002	Total Alkalinity as CaCO3	196	190	202	N/A	ppm	Naturally occurring soluble mineral salts.
2005 2006	Total Dissolved Solids	296	262	329	1000	ppm	Total dissolved mineral constituents in water.
2006 2002	Zinc	10	4.3	15	5	ppb	Moderately abundant naturally occurring element; used in the metal industry.